

AMENDMENTS TO THE CLAIMS

1-11. (Cancelled)

12. (Currently Amended) A catheter for the uniform delivery of fluid throughout an anatomical region, comprising:

an elongated, non-porous tube having a uniform, non-expandable diameter with a substantially consistent cross-sectional size between a proximal end and a closed distal end, said proximal end of said tube configured to be connectable to a supply of fluid located external of a body of a patient in which said catheter is placed, and said tube having a plurality of exit holes in side walls of said tube, said exit holes provided along a length of said tube defining an infusion section of said catheter, said tube being sized to be inserted into an anatomical region;

an elongated member permanently positioned within said tube, said elongated member being sized so that an annular space is formed between said tube and said elongated member, said elongated member being formed of a porous material that becomes saturated with a fluid introduced within said tube; and

an annular member disposed near the proximal end of said infusion section and configured to substantially prevent fluid introduced within said tube from entering said infusion section without first passing through said elongated member;

wherein said catheter is configured so that a fluid introduced into a proximal end of said tube will flow through said exit holes at a substantially uniform rate throughout said infusion section.

13. (Previously Presented) The catheter of Claim 12, wherein said plurality of exit holes are uniformly spaced along said length of said tube.

14. (New) The catheter of Claim 12, wherein said elongated member is concentric with said tube.

15. (New) The catheter of Claim 12, wherein said elongated member is not concentric with said tube.

16. (New) The catheter of Claim 12, wherein said elongated member is secured to said tube by a ring-shaped bond generally midway between the proximal and distal ends of said infusion section.

Application No.: 10/828,923
Filing Date: April 21, 2004

17. (**New**) The catheter of Claim 12, wherein said elongated member is bonded to said tube at the distal end of said elongated member.

18. (**New**) The catheter of Claim 12, wherein said porous material has an average pore size within the range of 0.1 - 50 microns.

19. (**New**) The catheter of Claim 12, wherein said annular space has a radial width less than about 0.005 microns.

20. (**New**) The catheter of Claim 12, further comprising an air filter in the flow path of said tube.

21. (**New**) The catheter of Claim 12, wherein said annular member comprises a ring-shaped adhesive bond.

22. (**New**) The catheter of Claim 12, wherein said elongated member is formed to have a generally solid cross-section of said porous material.

23. (**New**) The catheter of Claim 12, wherein the porous material of the annular member is configured to expand when the annular member is saturated, said porous material configured to expand into the annular space without pressing against the tube.

24. (**New**) The catheter of Claim 12, wherein the porous material comprises a hollow fiber material.

25. (**New**) The catheter of Claim 12, wherein the porous material comprises a material selected from the group consisting of polyethylene, polysulfone, polyethersulfone, polypropylene, polyvinylidene difluoride, polycarbonate, and nylon.